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WHAT IS CLAIMED IS:

Sub B2

1. A missile launcher for accepting a canisterized missile, which missile canister defines a missile launch end and a missile exhaust end, for, prior to missile launch, holding said missile canister in a generally vertical launch position below a deck, said missile launcher comprising:
10 at least one elongated exhaust gas chimney;
- 15 a support structure defining a generally axial cavity defining a missile launch end and a missile exhaust end, said cavity of said support structure having length and cross-sectional dimensions sufficient to accommodate said missile canister, said at least one exhaust chimney lying along the exterior of said support structure and extending, parallel with said axis of said cavity, from near said missile launch end to near said missile exhaust end;
- 20 a missile exhaust plenum attached near said missile exhaust end of said support structure, said missile exhaust plenum being coupled to said at least one exhaust chimney near said missile exhaust end of said support structure, said missile exhaust plenum further including attachment means for attachment to said missile exhaust end of said missile canister ^{for what} for routing missile exhaust gas from said missile exhaust end of said support structure to said at least one chimney, for

causing missile exhaust gas to vent from said at least one chimney near said missile launch end of said support structure; and

35 a door structure attached to said missile launch end of said missile launch structure, [for, when closed, protecting at least said support structure, said at least one chimney, and any missile canister accommodated 40 within said cavity,] and for, [when open, providing clearance for launch of said missile, and for venting of said exhaust gas from said at least one chimney.]

2. A missile launcher according to claim 1, wherein said cavity has a rectangular cross-section.

3. A missile launcher according to claim 2, wherein said rectangular cavity has a square cross-section.

4. A missile launcher according to claim 3, wherein said canisterized missile is a Mk 25 canisterized missile.

5. A missile launcher according to claim 1, wherein said support structure is a lattice.

6. A missile launcher according to claim 1, wherein said at least one exhaust chimney is two exhaust chimneys.

7. An array of missile launchers,
each of said missile launchers of said array
being dimensioned for accepting a canisterized
missile, which missile canister defines a
5 missile launch end and a missile exhaust end,
each of said missile launchers being for, prior
to missile launch, holding said missile
canister in a generally vertical launch
position below a deck, each of said missile
10 launchers comprising:

at least one elongated exhaust gas
chimney;

15 a support structure defining a
generally axial cavity defining a missile
launch end and a missile exhaust end, said
cavity of said support structure having length
and cross-sectional dimensions sufficient to
accommodate said missile canister, said at
least one exhaust chimney lying adjacent the
20 exterior of said support structure and
extending, parallel with said axis of said
cavity, from near said missile launch end to
near said missile exhaust end;

25 a missile exhaust plenum attached to
said support structure near said missile
exhaust end of said support structure, said
missile exhaust plenum being coupled to said at
least one exhaust chimney near said missile
exhaust end of said support structure, said
30 missile exhaust plenum further including
attachment means for attachment to said missile

exhaust end of said missile canister, for
routing missile exhaust gas from said missile
exhaust end of said support structure to said
35 at least one chimney, for causing missile
exhaust gas to vent from said at least one
chimney near said missile launch end of said
support structure;

a door structure attached to said
40 missile launch end of said missile launch
structure, for, when closed, protecting at
least said support structure, said at least one
chimney, and any missile canister accommodated
within said cavity, and for, when open,
45 allowing egress of said missile and venting of
said exhaust gas from said at least one exhaust
chimney; and said array further comprising

attachment means coupled to each of
said missile launchers of said array, for
50 attaching said missile launchers to each other
to form said array, and for attaching said
array to an underlying structure; and

a canisterized missile located within
each of said cavities.

8. A missile launcher for accepting
a missile canister, which missile canister
defines a missile launch end and a missile
exhaust end, for, prior to missile launch,
5 holding said missile canister in a generally
vertical launch position below a deck, said
missile launcher comprising:

at least one elongated exhaust gas

chimney;

10 a lattice support structure defining
a generally axial cavity defining a missile
launch end and a missile exhaust end, said
cavity of said lattice support structure having
length and cross-sectional dimensions
15 sufficient to accommodate said missile
canister, said at least one exhaust chimney
lying adjacent the exterior of said support
structure and extending from near said missile
launch end to near said missile exhaust end of
20 said support structure;

 a missile exhaust plenum attached
near said missile exhaust end of said support
structure, said missile exhaust plenum being
coupled to said at least one exhaust chimney
25 near said missile exhaust end of said support
structure, said missile exhaust plenum further
including attachment means for attachment to
said missile exhaust end of said missile
canister, for routing missile exhaust gas from
30 said missile exhaust end of said support
structure to said at least one chimney, for |
thereby causing missile exhaust gas to vent
from said at least one chimney near said
missile launch end of said support structure;

35 and

a door structure attached to said
missile launch end of said missile launch
structure, for, when closed, protecting at
least said lattice support structure, said at
40 least one chimney, and any missile canister

45 accommodated within said cavity, and for, when open, providing clearance for launch of that missile accommodated within a canister within said cavity, and for allowing egress of said exhaust gas from said at least one chimney.

9. A missile launcher according to claim 8, wherein the cross-section of said cavity is generally rectangular in cross-section.

10. A missile launcher according to claim 9, wherein said cavity is generally square in cross-section.

11. A missile launcher according to claim 10, wherein a missile canister lies within said cavity.

12. A missile launcher according to claim 11, wherein said missile canister is a (Mk 25 missile canister).

5 13. A missile launcher according to claim 8, wherein said lattice support structure further comprises attachment means located near said missile launch end of said support structure, for attaching said support structure to one of (a deck) and an adjacent one of said missile launchers.

14. A missile launcher according to

claim 8, wherein said missile launcher support structure further comprises attachment means lying along the exterior of said support structure, for aiding in attachment of an additional, like missile launcher, to thereby form a missile launcher array.

15. A missile launcher according to claim 8, wherein said at least one exhaust chimney comprises two mutually parallel exhaust chimneys of substantially equal length.

16. An array of missile launchers for accommodating and protecting a plurality of Mk 25 missile canisters, each of which missile canisters may include one or more missiles, and each of which missile canisters defines a missile launch end and a missile exhaust end, for, in use, accommodating said missile canisters in a generally vertical launch position below a deck, said array of missile launchers including a battery including a plurality of individual missile launchers, each of said individual missile launchers including:
at least one elongated exhaust gas chimney;
15 a lattice support structure defining a generally axial cavity defining a missile launch end and a missile exhaust end, said cavity of said lattice support structure having length and cross-sectional dimensions sufficient to accommodate one of said missile

canisters, said at least one exhaust chimney being adjacent the exterior of said support structure, and extending from near said missile launch end to near said missile exhaust end of
25 said support structure;

a missile exhaust plenum attached to said support structure near said missile exhaust end of said support structure, said missile exhaust plenum being coupled to said at
30 least one exhaust chimney near said missile exhaust end of said support structure, said missile exhaust plenum further including attachment means for attachment to said missile exhaust end of said missile canister, for
35 routing missile exhaust gas from said missile exhaust end of said support structure to said at least one chimney, for causing missile exhaust gas to vent from said at least one chimney near said missile launch end of said support structure; and

a door structure attached to said missile launch end of said missile launch structure, for, when closed, protecting at least said support structure, said at least one chimney, and any missile canister accommodated within said cavity, and for, when open, allowing egress of said missile from said missile canister and said exhaust gas from said at least one chimney.

17. An array of missile launchers according to claim 16, further comprising a

missile canister accommodated within each individual missile launcher of said array.

18. An array of missile launchers according to claim 16, wherein said axial cavity is square, and is dimensioned to accommodate Mk 25 missile canisters.

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